

IN THE CLAIMS

Claim 1 (Currently Amended): A sender device for sending an encrypted signal, the device comprising a chaos generator producing an encrypted electrical signal, and

a feedback loop comprising means for delayline-forming means, a non-linear means circuit element, and a mixer means circuit element which receives the loop signal on one input and the signal to be encrypted on another input, wherein the feedback loop includes means for filter-forming means which limit the spectrum of the encrypted signals to one or more spectrum bands.

Claim 2 (Currently Amended): A sender device according to claim 1, wherein said means for filter-forming means disposed in the feedback loop present a transfer function which distributes the chaotic signal statistically over a given spectral profile.

Claim 3 (Currently Amended): A sender device according to claim 1, wherein the means for filter-forming means disposed in the feedback loop comprise a bandpass filter.

Claim 4 (Original): A sender device according to claim 3, wherein the passband of said filter covers the spectral band of the signal to be encrypted, having a bandwidth that is slightly greater than that of said spectral band.

Claim 5 (Original): A sender device for emitting an encrypted signal, the device having a plurality of sender modules in cascade, each being constituted by a device according to claim 1.

Claim 6 (Currently Amended): A receiver device for receiving an encrypted signal, the device comprising means for receiving said signal, and

a feedback loop comprising means for delayline-forming means and a non-linear means circuit element, wherein in order to receive a signal encrypted by a device

according to claim 1, the feedback loop includes means for filter-forming means whose characteristics are identical to those of the means for filter-forming means in the feedback loop of the sender device.

Claim 7 (Currently Amended): A receiver device for receiving a signal encrypted by a sender device comprising a plurality of sender modules according to claim 5, the receiver device comprising a plurality of receiver modules in cascade, each constituted by a device according to claim 6, the number of these modules being the same as the number of modules in the sender device, the means for filter-forming means in the feedback loops of the reception modules having characteristics that are identical to those of the means for filter-forming means in the a feedback loop of the sender modules.

Claim 8 (Original): A sender/and or receiver device for an encrypted signal for transmission by radio over a voice signal carrier, the device including a device according to claim 1.

Claim 9 (Currently Amended): A transmission system for transmitting encrypted signals, the system comprising a sender device according to claim 1, a complementary receiver device, and a transmission channel between said sender device and said receiver device.

Claim 10 (Currently Amended): A radio transmission system for transmitting encrypted signals, the system comprising a sender device according to claim 1, a complementary receiver device according to claim 6, and a transmission channel between said sender device and said receiver device, said transmission channel including means for analog-to-digital conversion converting means and means for digital-to-analog conversion converting means respectively downstream and upstream from the sender device and from the receiver device.